STATE FOREST LAND
EVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Highlighted questions are supplemental to the standard SEPA checklist. These questions look at the proposed project in relationship to the surrounding landscape. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the attached forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name: **RCP 800** Agreement #: **30-074752**

2. Name of applicant:

   Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:

   Central Region
   Robert W. Johnson
   Washington State Department of Natural Resources
   1405 Rush Road
   Chehalis, WA 98532

4. Date checklist prepared: **03/28/2003**

5. Agency requesting checklist:

   Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

   a. Auction Date: **2004**
   b. Planned contract end date (but may be extended): **2005**
   c. Phasing: **Does not apply.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Timber Sale

   a. Site preparation: **As needed, in accordance with the Final Forest Resource Plan (July 1992), Forest Practices rules, and Final Habitat Conservation Plan (September 1997).**

   b. Regeneration Method: **As needed, in accordance with the Final Forest Resource Plan (July 1992), Forest Practices rules, and Final Habitat Conservation Plan (September 1997).**

   c. Vegetation Management: **As needed, in accordance with the Final Forest Resource Plan (July 1992), Forest Practices rules, and the Final Habitat Conservation Plan (1997).**

   d. Thinning: **As needed, in accordance with the Final Forest Resource Plan (July 1992), Forest Practices rules, and the Final Habitat Conservation Plan (September 1997).**

Roads:

Roads remaining at the termination of the sale will be used for future management activities as necessary. Road maintenance and periodic ditch and culvert cleanout will occur as necessary.

Rock Pits and/or Sale:

The existing Walville Quarry (Sec. 23, Township 13 North, Range 6 West, W.M.) will be the rock source for this proposed sale.
THIS QUESTION ASKS FOR "FUTURE" ACTIVITIES, EXPANSIONS, ETC. …WILL THIS ROCK PIT BE USED FOR FUTURE FOREST MANAGEMENT ACTIVITIES?

Other:

Firewood permits for the sale area may be made available to the public if, after harvest, downed wood is plentiful near roadsides. Landing slash piles may be burned following the completion of logging.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐303 (d) – listed water body in WAU: ☐temp ☐sediment ☐completed TMDL (total maximum daily load):
☐Landscape plan:
☐Watershed analysis:
☐Interdisciplinary team (ID Team) report:
☒Road design plan: **Available at Central Region office.**
☒Wildlife report: **Available at Central Region office.**
☐Geotechnical report:
☐Other specialist report(s):
☐Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
☒Rock pit plan: **Available at Central Region office.**
☒Other: **Information was gathered from the State Soil Survey; WA Department of Natural Resources' Forest Resource Plan (July 1992); GIS maps that display water types, rain on snow areas, and areas of potential mass wasting and erosion; WA Department of Natural Resources Marbled Murrelet Habitat Reclassification maps produced by RPAM division; WA Department of Natural Resources HCP; Planning and Tracking reports; and ESA listed Salmonid species map produced by Forest Practices. All are available at Central Region office.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

☒HPA **log #ST-D9199-04** ☒Burning permit ☐Shoreline permit ☒Incidental take permit **1168 and PRT812521**
☒FPA #_____ ☐Other:

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

A total of 124 acres were considered for harvest in Sections 34, 35, and 35, Township 13 North, Range 06 West, W.M. and Section 3, Township 12 North, Range 06 West, W.M. with the RCP 800 Timber Sale. The net timber sale harvest area consists of three proposed even-aged regeneration harvest units of approximately 78 acres and right-of-way harvest of six acres.

Unit #1: Approximately 35 acres of mature timber in Sections 35 and 36, Township 13 North, Range 06 West, W.M. were considered for harvest. Photo and map reconnaissance were used to determine the proposed sale boundary. Field reconnaissance of the sale area showed two type 3 streams, which were bounded out of the unit by RMZs averaging 200 feet wide, reducing the harvest area to 25 acres. Taking out another ½ acre of R/W for the existing RCP 800 road reduced the net harvest area to 25 acres. Even though numerous beaver dams make the two type 3 streams greater than five feet wide, wind buffers were determined to be unnecessary due to leeward and low slope positions, soil type, and riparian species composition. A total of 200 leave trees (average of 8 trees per acre), approximately 2.5 acres, will be left within Unit #1 to retain unique wildlife habitat characteristics.

Unit #2: Approximately 60 acres of mature timber in Section 35, Township 13 North, Range 06 West, W.M. were considered for harvest. The same timber type extends into the Upper Mill Creek owl circle (Status 1), but was not considered for harvest in order to protect spotted owl habitat. Photo and map reconnaissance were used to determine the proposed sale boundary. Field reconnaissance of the sale area showed three type 3 streams, which were bounded out of the unit by RMZs averaging 200 feet wide, reducing the harvest area to 42.5 acres. Taking out another ½ acre of R/W for an existing spur road reduced the net harvest area to 41.5 acres. A total of 409 leave trees (average of 9.5 trees per acre), approximately 3 acres, will be left within Unit #2 to retain unique wildlife habitat characteristics.

Unit #3: Approximately 23 acres of mature timber in Section 34, Township 13 North, Range 06 West, W.M. were considered for harvest. Photo and map reconnaissance were used to determine the proposed sale boundary. Field reconnaissance of the unit revealed two type 3 streams, which were bounded out of the unit by RMZs averaging 200 feet wide, reducing the sale acreage to its current size of 11 acres. A total of 91 leave trees (average of 8.3 trees per acre), approximately 0.75 acres, will be left within Unit #3 to retain unique wildlife habitat characteristics.

Approximately 6 acres of road right-of-way in Section 3, Township 12 North, Range 06 West, W.M. and Section 34, Township 13 North, Range 06 West, W.M. will be cleared for new construction and reconstruction associated with the proposed sale.

Estimated volume: 2,765 MBF.

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Pre-Harvest Stand Description: **Unit #1, approximately 25 acres, is a 73-year-old stand of mature Douglas-fir and western hemlock, including scattered red alder in the overstory. The understory consists of western hemlock, vine maple, red alder, and cascara buckthorn. The forest floor is dominated by sword fern and Oregon grape in the uplands, and by salmonberry in the draws. Unit #1 is surrounded on the northwest, west, and south boundaries by DNR managed land, and the east and north boundaries are along private ownership.**

Unit #2, 42 acres, is a 75+-year-old stand of mature Douglas-fir and western hemlock, with scattered bigleaf maple and red alder in the overstory. The understory consists of western hemlock, red alder, and vine maple. The forest floor consists of sword fern and Oregon grape in the uplands, and devil's club and salmonberry in the draws. Unit #2 is surrounded entirely by DNR managed land.

Unit #3, 11 acres, is a 75-year-old stand of mature Douglas-fir and western hemlock, with scattered red alder in the overstory. The understory consists of western hemlock, red alder, and vine maple. The forest floor consists of sword fern in the uplands, and devil's club and salmonberry in the draws. Unit #3 is surrounded entirely by DNR managed land.

The road construction right-of-way, 6 acres, runs through a 28-year-old Douglas-fir plantation with scattered red alder in the overstory, entirely on DNR managed land.

Type of Harvest: **An even-aged harvest strategy will be implemented using cable and shovel harvesting techniques. In Unit #1, an average of 8 trees per acre (200 total leave trees) will be left; in Unit #2 an average of 9.5 trees per acre (409 total leave trees) will be left; and in Unit #3, an average of 8.3 trees per acre (91 total leave trees) will be left as leave trees. Primarily windfirm Douglas-fir with some western hemlock and western redcedar were chosen to remain in the units after harvest. The leave trees are arranged in 20-40 tree clumps and scattered throughout the units. Where possible, all down wood and snags will be left within the units to provide habitat for amphibians, birds, and small mammals.**

Overall Objectives: **The overall objective for these forest management units is to manage for sustainable production of revenue for State trust beneficiaries. Future management of these units will be conducted with a broad landscape perspective in mind, including wildlife habitat, riparian functions, and aesthetic impacts. This will be accomplished while meeting Forest Practices rules, Habitat Conservation Plan objectives, and Forest Resource Plan objectives.**

c. Road activity summary. See also attached forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		**3,135**	**1.6**	**0**
Reconstruction		**12,939**		**0**
Maintenance		**0**		**0**
Abandonment		**0**	**0**	**0**
Bridge Install/Replace	**0**			**0**
Culvert Install/Replace (fish)	**0**			**0**
Culvert Install/Replace (no fish)	**3**			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See attached timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")

a. Legal description:

Section 34, Township 13 North, Range 6 West, W.M.
Section 35, Township 13 North, Range 6 West, W.M.
Section 36, Township 13 North, Range 6 West, W.M.
Section 3, Township 12 North, Range 6 West, W.M.

b. Distance and direction from nearest town (include road names):

The sale is approximately four miles due east of Pe Ell, WA. The sale units are located approximately one mile north of State Route 6 on the RCP mainline.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
ROCK-JONES	**28097**	**124**

Sale Area: 84 acres
SUB-BASIN AND SUB-BASIN ACRES?

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)

This proposal is located within the Rock-Jones WAU. Agricultural and home sites are located in the valleys near the major streams, with some home sites located in the uplands. There appears to be a recent trend towards increasing conversion of agriculture and forestry lands to home sites in the low- to mid-elevations. The uplands are mainly managed for timber production. Ownership includes large industrial forests, small private forests, and DNR managed forests. Forested stands within the WAU appear to be almost exclusively second and third growth stands. The number of Forest Practices shown on the WAU maps (referenced above on the DNR website) along with observations within the WAU indicate that the timber stands are intensely managed. Management includes regeneration harvests, thinnings, and partial cuts.

DNR manages 7,108 acres of land in the Rock-Jones WAU (25% of the total WAU, the WAU is 28,098 total acres THIS DOES NOT ANSWER THE ACRES FOR THE WAU ABOVE…WHICH IS CORRECT?). In this WAU, there has been approximately 77 acres (<1% of the total WAU acreage) of regeneration harvest on DNR managed lands within the last five years. Currently, DNR does not expect to sell any additional acres as regeneration harvest in the next five years. These stands have been selected because they will meet the financial requirements (timber type, stand age, trust, etc.) and the ecological requirements (HCP and Forest Practice requirements, green-up policies, etc.) of the Department.

DURING JIM H.'S REVIEW OF THE SEPA, HE HAS BEEN ASKING "Aren't we supposed to estimate the activities (acres) on all ownerships within the WAU's and/or sub-basins?"..."Aren't we supposed to estimate the amount of harvest on private?" **YOU CAN FIND ESTIMATES AT THE FOLLOWING ADDRESS:** http://www.wadnr.gov/it/gis/gisreftool/mapshome.html

Unit #3 of the proposed sale is entirely within the Upper Mill Creek owl circle, site # 877 (Status 1). Habitat within Unit #3 is not typed as "Best Available" or "Potential" Northern spotted owl habitat according to the December 9, 2002 Memo of Understanding between Washington Department of Natural Resources and Washington Department of Fish and Wildlife. Habitat within Unit #3 is typed as "Forest Cover"; therefore, harvest timber in Unit #3 of the proposed sale is permitted. Approximately 500 feet of road reconstruction will occur within the same owl circle, requiring the removal of one row of 28-year-old Douglas-fir trees along each side of the existing road within the right-of-way. Habitat within the road reconstruction right-of-way is typed as "Young Stands"; therefore, right-of-way harvest is permitted in accordance with the December 9, 2002 Memo of Understanding between Washington Department of Natural Resources and Washington Department of Fish and Wildlife. Unit #2 of the proposed sale is adjacent to the Upper Mill Creek owl circle, Site # 877 (Status 1). While the timber type of Unit #2 extends into the owl circle, no portion of Unit #2 is within the circle. WOULD IT BE BENEFICIAL TO OUTSIDE REVIEWERS TO EXPLAIN "FOREST COVER"? AS THE MEMO IS GENERALLY NOT ATTACHED AND THESE DEFINITIONS ARE NOT CLEARLY DEFINED OR DESCRIBED IN THIS PARAGRAPH…IF YOU HAVE A COPY OF THIS MEMO, COULD WE PLEASE GET A COPY OF IT? …THE MEMO PROBABLY SHOULD BE LISTED IN A.11. AND AVAILABLE AT CENTRAL REGION OFFICE. (HOPEFULLY THAT WOULD ELIMINATE EXPLAINING "FOREST COVER", "BEST AVAILABLE", AND "POTENTIAL" HABITAT DEFINITIONS…WHAT DO YOU THINK?)

The DNR has an HCP agreement with the federal government concerning threatened and endangered species and their habitats, which requires the Department to manage landscapes in a conservative manner. This agreement substantially helps the Department to mitigate for harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- **Designating Riparian Management Zones averaging 200 feet wide along five type 3 streams.**
- **Retaining an average of eight leave trees per acre in Unit #1, 9.5 leave trees per acre in Unit #2, and 8.3 trees per acre in Unit #3 scattered and clumped throughout the units.**
- **Analyzing, designing, and constructing a road system to minimize effects on the environment.**

Retaining RMZs protects water quality, stream bank integrity, and stream temperature WEC HAS BEEN MAKING COMMENTS REGARDING ASSUMPTIONS LIKE THIS…DO WE WANT TO MAKE THIS ASSUMPTION? CAN WE BACK THIS STATEMENT? . RMZs provide LWD recruitment and habitat for riparian obligate species. Furthermore, the RMZs should develop older forest characteristics that (in combination with other strategies) will help support older-forest dependant wildlife populations. The strategy of retaining eight leave trees per acre in Unit #1, 9.5 trees per acre in Unit #2, and 8.3 trees per acre in Unit #3 should provide legacy elements for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. In combination, these features should provide elements of older forest habitat characteristics within the third growth stand. By managing to develop older forest characteristics, habitats will be provided for wildlife species dependent on older forest habitat. Finally, road system analysis and design required under the Forest Practices RMAP process will improve roads and minimize road impacts on the environment. The road plan analysis required under the Forest Practice RMAP process in the P&E Block (which encompasses all of the DNR managed lands in the Rock-Jones WAU) is in the process of being completed. Haul routes for this proposal have been evaluated for potential impact to the environment. To assure sediment delivery is controlled during the hauling of forest products, multiple cross drains and other structures may be used to disconnect ditch water from flowing streams. Road ditch water will be routed to the forest floor for filtering prior to entering flowing watercourses. New road construction will be located on or near stable ridge top locations.

In addition to mitigation efforts incorporated into this proposal under the HCP and Forest Practices RMAP process, DNR will include contract language in this proposal to meet legal requirements of Forest Practices and Department of Ecology regarding sediment delivery to streams. This language addresses timing of operations, restrictions on impacts to soils (compaction/rutting), and requirements for sediment control devices and techniques.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☐Rolling, ☒Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Rock-Jones WAU, located at an elevation range of 300 to 1500 feet, has topography characterized as rolling with deep "V"-shaped draws in higher elevations. In lower portions of the drainage, slopes vary from 10 to 40% and in higher portions of the drainage, slopes range from 40% to 80%. The WAU is primarily rain dominated, with 8% of the WAU in the rain-on-snow zone. This WAU averages 70 to 90 inches of rain per year, which supports a dominant Douglas-fir timber type in the WAU in association with western hemlock occurring on north facing slopes. Hardwood species, particularly red alder and bigleaf maple, frequently occur on mid to lower slopes, intermixed throughout the WAU.

VEGETATION ZONE? SEE SEPA INSTRUCTIONS…

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

Approximately 64% of the proposed sale is less than 35% slope, with the units ranging in elevation from 786 to 1,451 feet. The dominant tree species is Douglas-fir and western hemlock. No portion of the proposed sale is in the rain-on-snow zone.

b. What is the steepest slope on the site (approximate percent slope)?

Approximately 77% within Unit #2.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
4356	**SILT LOAM**	**8-30**	**33**	**INSIGNIFICANT**	**MEDIUM**
1937	**SILT LOAM**	**30-65**	**17**	**MEDIUM**	**HIGH**
9805	**SILT LOAM**	**65-90**	**23**	**HIGH**	**HIGH**
0193	**SILT LOAM**	**8-30**	**3**	**INSIGNIFICANT**	**MEDIUM**
1934	**SILT LOAM**	**1-8**	**1**	**INSIGNIFICANT**	**MEDIUM**
1936	**SILT LOAM**	**8-30**	**7**	**LOW**	**MEDIUM**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) Surface indications:

Yes. We have observed indications of unstable soils near the sale vicinity. This area is characterized as a shallow-rapid failure (approximately 0.25 acres) of a steep side slope found on an inner draw. The slope failure occurs on the far side (south) of the type 3 stream to the south of Unit #3. Also, the Fern Creek sub-drainage of the neighboring Willapa Headwater WAU contains a deep-seated landslide. Fern Creek is 700 feet away (at its closest point) from the road construction associated with this proposal, but ridge top construction should not affect slope stability in the Fern Creek sub-drainage.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐No ☒Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There are indications of slope failures in the WAU, generally shallow-rapid failures associated with steep riparian areas and headwalls at the top of steep draws. The only known occurrence of this slope failure in the WAU is on the far side of the type 3 stream to the south of Unit #3 of the proposed sale. SUB-BASIN?

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☒No ☐Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
Associated management activity:

None known.

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☐No ☒Yes, describe similarities between the conditions and activities on these sites:

Unit #3 of the proposed sale is similar to the shallow-rapid failure described in B.1.d.1. in that it has the same soil type as the shallow-rapid failure, but the steep inner draw where the failure occurred was tagged out of the proposed sale.

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

The shallow-rapid failure described in B.1.d.1. and adjacent slopes (approximately eight acres) were bound out of Unit #3. Proposed roads are located on or near ridgetops and will be crowned, ditched, and cross-drained. Soils exposed during road construction will be grass seeded. Shovel logging will not be allowed on slopes over 30%.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads:**1.6** Approx. acreage new landings: **0.5** Approx. acreage rock pit fills:**0** Fill source: **None**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Some erosion could occur as a result of this proposal. Following procedures outlined in the Road Plan, the amount and severity of the erosion should be kept to a minimum.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):

Approximately 2.8% (2.5 acres) of the sale area will be on impervious surfaces (gravel roads).

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

Road construction will not be permitted between September 30 and May 1 unless authorized by the Contract Administrator. In order to reduce or control erosion, roads will be constructed on ridge tops and side slopes averaging less than 40%; following road construction areas of exposed soil will be grass seeded; and culverts will be installed at a location to divert ditch water onto the forest floor and maintained in functional condition. Road reconstruction consists primarily of adding a lift of rock to existing road running surfaces. To reduce the potential of slope and landing failure, slash piles on landings will be burned to reduce the weight on the slope. After harvest, seedlings will be planted or the stand will regenerate naturally. Though disturbed, native plants such as grasses, ferns, and salal will persist within the Douglas-fir/ western hemlock timber type.

Shovel logging shall be in accordance with Shovel Logging Specifications on file at the region office. Lead-end suspension is required on all cable settings. Yarding may be suspended at the discretion of the Contract Administrator when soil rutting exceeds four inches as measured from the natural ground line when there is potential for damage to any public resource. If yarding is suspended, the Contract Administrator must be assured that future harvest operations will not potentially damage any public resource. To reduce potential damage to the earth, the Contract Administrator may require water bars to be constructed by hand and grass seed to be placed on exposed soils. Any and/or all operation(s) of this sale may be temporarily suspended when, in the opinion of the Contract Administrator, there is the possibility of sediment being delivered to any flowing water tributary to any fish-bearing stream. RMZs averaging 200 feet wide will be left along the five type 3 streams. Equipment Limitation Zones, 30-foot wide zones measured from the bank full width of the six type 5 streams, will be utilized to decrease the possibility of sediment delivery and loss of stream function.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

No emissions are anticipated other than minor amounts of heavy equipment exhaust, road dust created from hauling, and smoke created from landing burning which will be done in accord with the State's Smoke Management Program.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Slash pile burning will be done in the fall during the rainy season under the direction of the State's Smoke Management Program. A burn permit will be obtained before burning begins.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See attached timber sale map and forest practice base maps.)

Unit #1: Two type 3 streams flow on the south and northeast edges of the unit, in an easterly direction into Rock Creek. One type 5 stream originates on the southwest boundary of Unit #1 and flows into the southerly type 3 stream.

Unit #2: The same two type 3 streams that flow past Unit #1 also flow on the southwest and north edges of Unit #2, in an easterly direction. A third type 3 stream originates in the unit and flows into the southerly type 3 stream. The southerly type 3 stream originates as a type 5 stream that constitutes the west edge of Unit #2. The third type 3 stream originates as a type 5 stream within the unit before becoming a type 3 stream. A third type 5 stream also originates within Unit #2 and flows east before flowing into a type 3 stream outside the vicinity of the unit.

Unit #3: Two type 5 streams originate in the north and east corners of Unit #3, and become two type 3 streams that flow in a southerly direction. The two type 3 streams merge outside of the unit boundary and continue south.

a) Downstream water bodies:

Walville Creek and Salmon Creek to Rock Creek

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
	3	**5**	**200**
	5	**6**	**0**

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

All five type 3 streams are protected by an average 200-foot RMZ. The two type 3 streams in Unit #3 are less than five feet wide, and therefore do not need wind buffers. The three type 3 streams in Unit #2 are also less than 5 feet wide, but the same two type 3 streams in Unit #1 have beaver ponds and are therefore greater than 5 feet wide. Even though numerous beaver dams make the two type 3 streams greater than five feet wide, wind buffers were determined to be unnecessary due to leeward and low slope positions, soil type, and riparian tree species composition, which is mostly mature red alder.

An Equipment Limitation Zone will be utilized on the six type 5 streams to decrease possible loss of stream function and decrease possible sediment delivery due to operating equipment. An Equipment Limitation Zone is a 30-foot wide buffer measured horizontally from the bankfull width of a type 5 water. Less than 10% of the ground within the Equipment Limitation Zone may be disturbed by ground-based equipment or by partially suspended logs.

HOW WERE STREAMS TYPED?

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐No ☒Yes (See RMZ/WMZ table above and attached timber sale map.)
Description (include culverts):

Tailhold cables may be strung across the five type 3 streams; however, no material will be yarded through them. The six type 5 streams within the unit may have timber felled into and across them. When yarding occurs near the six type 5 streams, an Equipment Limitation Zone will be utilized to maintain stream function, stream bank integrity, and decrease possible sediment delivery.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
☒No ☐Yes, description:

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒No ☐Yes, describe location:

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒No ☐Yes, type and volume:

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?

Soil maps of the Rock-Jones WAU indicate approximately 14% of the WAU contains soils with high potential for erosion, and 11% of the WAU contains soils with a high potential for mass wasting. Approximately 72% of this WAU contains soils with a medium potential for soil erosion. Eroded material that enters streams during moderate to high flows can be observed as a noticeable increase in stream turbidity. The increased turbidity can be observed in streams originating in mature stands with no forest practice activity. The potential for eroded material to enter surface water based on this proposal is low due to the erosion control measures included in the proposal. See B.1.h.

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☐No ☒Yes, describe changes and possible causes:

None in the vicinity of the sale area, but there are in other areas of the WAU where slopes are steeper than 65%. POSSIBLE CHANGES/CAUSES?

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☐No ☒Yes, explain:

This proposal is expected to have minimal to no effect on water quality. RMZs averaging 200 feet along the five type 3 streams and leave trees along the six type 5 streams will maintain stream bank integrity provide shade, and recruit large woody debris (LWD). Items listed in B.1.h. and B.3.d. should minimize sediment delivery to streams. These mitigation elements should limit affects on water quality in relation to the items of concern revealed in questions 1-8 above.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?

The Rock-Jones WAU averages 5.5 miles of road per square mile. ROAD MILES/SQUARE MILE IN SUB-BASIN (WEC HAS BEEN COMMENTING AND WE HAVE BEEN DIRECTED TO ANSWER THIS ONE…)

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒No ☐Yes, describe:

In recent years an, emphasis has been placed on using more cross-drain culverts both on new road construction and on existing road reconstruction. This has resulted in more ditch water being diverted back to the forest floor.

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☒No ☐Yes, approximate percent of WAU in significant ROS zone.
Approximate percent of sub-basin(s):

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☒No ☐Yes, describe observations:

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.

This proposal may slightly change the timing, duration, and amount of water in a peak flow event. Flow rates may increase slightly during low flow periods due to decreased transpiration and interception. However, the location of the unit, the size of the units, contribute to reducing peak flow. Leave trees

scattered and clumped throughout the units should help maintain water quality and reduce peak flow. Forest Resource Plan green-up policies should also limit contributions to peak flow.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒No ☐Yes, possible impacts:

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

The following are protection measures addressing peak flow/flooding impacts:

- **Designating Riparian Management Zones averaging 200 feet wide adjacent to the five type 3 streams to maintain stream bank stability and provide LWD.**
- **Maintaining future harvest unit size to less than 100 acres and following Forest Resource Plan green-up policies before harvesting adjacent DNR stands. This proposal consists of three harvest units totaling 84 acres.**
- **Retaining leave trees to intercept precipitation and provide transpiration to moderate increases in soil moisture content.**
- **Designating living leave trees to maintain soil strength from tree roots during periods of increased precipitation and soil moisture content.**

b. Ground Water:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Insignificant amounts of oil and other lubricants may be inadvertently leaked as a result of heavy equipment use. No lubricants will be disposed of on site, and any leaks will be cleaned up.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒No ☐Yes, describe:

a) Note protection measures, if any.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water runoff will be collected by road ditches and ditch-outs, and diverted onto the forest floor. Ditch-outs will be placed to minimize the amount of ditch water directly entering existing stream channels.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Some logging slash may enter into the six type 5 streams.

a) Note protection measures, if any.

An Equipment Limitation Zone will be utilized on all six type 5 streams. Leave tree locations will also aid in protecting streams from waste materials. See surface water, ground water, and water runoff sections above, questions B.3.a.1.c., B.3.a.16., B.3.b.3.a., and B.3.c.2.a.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

Cut banks will be revegetated prior to the onset of wet weather; the vegetative material will be used to collect sediment before entering flowing stream channels. Revegetation and reforestation measures will be utilized to reduce impacts to the earth. During the following planting season after harvest either tree seedlings will be planted or the stand will regenerate naturally. Though disturbed, native plants such as grasses, ferns, salal, and salmonberry will remain on site after logging and persist within the western hemlock/Douglas-fir timber type. Leave trees shall be scattered and clumped through the sale area with an average of 8 trees per acre in Unit #1, 9.5 trees per acre in Unit #2, and 8.3 trees per acre in Unit #3. Culverts and ditchouts will be installed at a location to divert ditch water onto the forest floor at the earliest point possible and will be maintained in a functional condition. A yearly maintenance schedule will be followed to allow for proper road surface runoff and drainage. Used oil will not be disposed of on site. Hazardous clean up materials will be kept on site during the operation. See B.1.h.

4. Plants

a. Check or circle types of vegetation found on the site:

☒deciduous tree: ☒alder, ☒maple, ☐aspen, ☐cottonwood, ☐western larch, ☐birch, ☐other:
☒evergreen tree: ☒Douglas fir, ☐grand fir, ☐Pacific silver fir, ☐ponderosa pine, ☐lodgepole pine,
☒western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☒Sitka spruce,

☒red cedar, ☐yellow cedar, ☐other:
☒shrubs: ☒huckleberry, ☒salmonberry, ☒salal, ☒other: **Oregon grape, sword fern**
☐grass
☐pasture
☐crop or grain
☒wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☒devil's club, ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐plant communities of concern:

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")

Unit #1: Unit #1 is surrounded on the northwest, west, and south boundaries by DNR managed lands, and the east and north boundaries are along private ownership. The northwest edge of the unit is bordered by approximately 145 acres of a 28-year-old Douglas-fir plantation. The west edge of the unit borders a 13-year-old Douglas-fir plantation, totaling approximately 70 acres. The south edge of Unit #1 includes an RMZ averaging 200 feet of similar species and age distribution as the unit, and beyond the RMZ is 100+ acres of a 29-year-old Douglas-fir plantation. The east edge of the unit is bordered by a recently planted clearcut (2002) totaling approximately 40 acres. The northeast edge of Unit #1 includes an RMZ averaging 200 feet of mature red alder before entering private ownership. Finally, the north edge of the unit borders approximately 40 acres of young red alder and brush, possibly including young planted Douglas-fir seedlings.

Unit #2: Unit #2 is surrounded entirely by DNR managed lands. The southeast corner of the unit is bordered by a 13-year-old Douglas-fir plantation totaling approximately 70 acres. The east edge of the unit borders both a 28-year-old Douglas-fir plantation of approximately 145 acres and an 8-acre 13-year-old Douglas-fir plantation. The north edge of the unit borders 80+ acres of a stand with similar species and age distribution as Unit #2, a 75+-year-old stand of mature Douglas-fir and western hemlock. The west edge is bordered by 49 acres of an 11-year-old Douglas-fir plantation, and finally, the southwest edge of Unit #2 borders 100+ acres of a 28-year-old Douglas-fir plantation.

Unit #3: Unit #3 is surrounded entirely by DNR managed lands. The unit is also surrounded entirely by timber stands of similar species and age distribution. The west edge of the unit borders a 200-foot RMZ, and beyond that is 56 acres of a 29-year-old Douglas-fir plantation. The south edge borders a 400-foot RMZ (two-sided), and beyond that is 49 acres of an 11-year-old Douglas-fir plantation. The north edge of the unit borders the same 80+ acres of 75+-year-old mature Douglas-fir and western hemlock as Unit #2 does.

2) Retention tree plan:

Unit #1 currently has an average of 80.8 trees per acre that have diameters (at breast height) of 12 inches or greater. It was determined that an average of eight trees per acre would be designated as leave trees (eight TPA is greater than 7% of the average number of trees having a dbh of 12 inches or greater). Unit #2 has approximately 136.2 trees per acre that have diameters of 12 inches or greater; therefore, an average of 9.5 trees per acre are designated as leave trees (9.5 TPA is equal to 7% of the average number of trees having a dbh of 12 inches or greater). Unit #3 has approximately 118 trees per acre that have diameters of 12 inches or greater. It was determined that an average of 8.3 trees per acre would be designated as leave trees (8.3 TPA is equal to 7% of the average number of trees having a dbh of 12 inches or greater).

Leave trees will be scattered and clumped throughout the units over a total area of 6.3 acres. A single clump is composed of 40 or fewer trees. Douglas-fir, western redcedar, and western hemlock with broken or deformed tops, when possible, were chosen as leave trees to increase chances of wildlife use and future snag recruitment. There was little snag component that could safely be retained within the units; therefore, eight green trees per acre in Unit #1, 9.5 trees per acre in Unit #2, and 8.3 trees per acre in Unit #3 will be left following harvest activities.

c. List threatened or endangered plant species known to be on or near the site.

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Though disturbed, native plants such as grasses, ferns, salal, and salmonberry will remain on site and will thrive with the Douglas-fir/western hemlock plantation, which will be established within one year after harvest completion or the stand will regenerate naturally. Some of the older trees on site will be left as wildlife trees to provide older forest characteristics as well as the RMZs averaging 200 feet along the five type 3 streams.

5. Animal

a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☒other: **Northern spotted owl**
mammals: ☒deer, ☐bear, ☒elk, ☒beaver, ☐other:
fish: ☐bass, ☐salmon, ☒trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☐oak woodlands, ☐balds, ☐mineral springs

b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
3	40130	SPOTTED OWL: Site:877-UPPER MILL CREEK - WILLAPA	THREATENED	ENDANGERED

c. Is the site part of a migration route? If so, explain.
☒Pacific flyaway ☐Other migration route: Explain if any boxes checked:

This site is located in a migratory waterfowl migration route (Pacific flyway), but none are known to use this specific area for feeding or resting.

d. Proposed measures to preserve or enhance wildlife, if any:

By designing this sale to comply with the department's HCP, wildlife and wildlife habitat will be preserved and enhanced. The small unit design is conducive to ungulate feeding patterns. Scattered and clumped leave trees are favorable to raptor perching, feeding, and nesting. Grass seeding exposed soils protects water quality and provides forage. Large diameter leave trees should enhance the wildlife habitat value of the future stand. Riparian Management Zones averaging 200 feet wide adjacent to five type 3 streams should will protect water quality; provide corridors for wildlife; and maintain habitat for fish, reptiles, and other riparian obligate species.

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.

Species /Habitat: **Northern spotted owl**
Protection Measures:

Unit #1 and Unit #2 are outside the Upper Mill Creek owl circle. Unit #3 of the proposed sale is entirely within the Upper Mill Creek owl circle, site # 877 (Status 1). Habitat within Unit #3 is not typed as "Best Available" or "Potential" Northern spotted owl habitat according to the December 9, 2002 Memo of Understanding between Washington Department of Natural Resources and Washington Department of Fish and Wildlife. Habitat within Unit #3 is typed as "Forest Cover", and therefore, harvest of timber in Unit #3 of the proposed sale is permitted. Also, approximately 500 feet of reconstruction within the Upper Mill Creek owl circle will require the removal of one row of 28-year-old Douglas-fir trees along each side of the existing road within the right-of-way. Habitat within this road reconstruction right-of-way is typed as "Young Stands", and therefore, harvest of right-of-way timber is permitted through the December 9, 2002 Memo of Understanding between Washington Department of Natural Resources and Washington Department of Fish and Wildlife.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minimal hazard incidental to operating heavy machinery. There is the possibility of a fire starting during the operating period, especially during fire season.

1) Describe special emergency services that might be required.

There are no special emergency services required at this time. Pump trucks and/or pump trailers will be required on site during fire season. In the event of a lubricant spill, the Purchaser will contact DNR and the Department of Ecology.

2) Proposed measures to reduce or control environmental health hazards, if any:

Clean up materials will be kept on site during the operations. Risk of fire spreading will be reduced by having a fire truck on site during operation and burning landings during the fall following the completion of operation. In the event of a lubricant spill, the Purchaser will contact DNR and the Department of Ecology.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Log trucks will be using forest roads, county roads and State Route 6. These are normal activities for this area. This is consistent with existing traffic. Noise will be increased during daylight hours when operations are being conducted. No houses are near this project.

3) Proposed measures to reduce or control noise impacts, if any:

None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)

Timber production, forest land management.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

No zoning for this area at this time.

f. What is the current comprehensive plan designation of the site?

The comprehensive plan designation is resource lands, forest of long-term significance.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This proposal is consistent with the designated forest land use classification by Pacific County under the Growth Management Act, the Forest Resource Plan (July 1992), and the Habitat Conservation Plan (1997).

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

Not applicable.

b. What views in the immediate vicinity would be altered or obstructed?

1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?

☒No ☐Yes, viewing location:

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☒No ☐Yes, scenic corridor name:

3) How will this proposal affect any views described in 1) or 2) above?

Not applicable.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Possible aesthetic impacts will be mitigated by leaving RMZs averaging 200 feet wide along five type 3 streams, and a total of 700 leave trees clumped and scattered to provide canopy cover throughout the units.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Hunting, recreational driving, as well as other informal recreation activities.

b. Would the proposed project displace any existing recreational uses? If so, describe:

No. However, recreational uses may be altered and/or limited during operations.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Access to the area will be enhanced by the roads constructed by this proposal.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None known.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

None.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Forest roads lead to State Route 6, which links the I-5 corridor to the west coast.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

No.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

See A.11.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

This proposal should not significantly affect the current transportation system or traffic circulation.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Approximately 15 vehicular trips per day will be generated during harvest operations. On completion of this proposal, some vehicle trips will be required to burn landings and reforest the area. After that, the proposal will generate less than five trips per year, except for forest management activities. Recreational trips by vehicles may increase.

g. Proposed measures to reduce or control transportation impacts, if any:

None are planned. If garbage dumping or vandalism becomes a problem, gates and/or tank traps may be installed.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Robert W. Johnson Pacific District Manager Date: _____
Title

Reviewed by: _____ Date: _____
Title